Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Samuel Lin Examiner # : 79120 Date: 8-11-03
Art Unit: 1653 Phone Number 306-3483 Serial Number: 09529232
Mail Box and Bldg/Room Location: 9D08 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

For Sequence Searches Only ***Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.***

Please search peptide sequence as the attached.

Thanks!

Sam Lin

C. Chan
Rush

****

STAFF USE ONLY	**Type of Search**	**Vendors and cost where applicable**
Searcher: _____	NA Sequence (#)_____	STN _____
Searcher Phone #: _____	AA Sequence (#)_____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____

Liu 09/529,232

=> fil hcaplu
FILE 'HCAPLUS' ENTERED AT 15:59:34 ON 11 AUG 2003
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FILE COVERS 1907 - 11 Aug 2003 VOL 139 ISS 7
FILE LAST UPDATED: 10 Aug 2003 (20030810/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d stat que
L3 4 SEA FILE=REGISTRY ABB=ON GGGG.DYEPIPEEA/SQSP
L4 5 SEA FILE=HCAPLUS ABB=ON L3

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L4 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:168720 HCAPLUS
DOCUMENT NUMBER: 136:382133
TITLE: The Methyl Group of N.alpha.(Me)Arg-containing Peptides Disturbs the Active-site Geometry of Thrombin, Impairing Efficient Cleavage
AUTHOR(S): Friedrich, Rainer; Steinmetzer, Torsten; Huber, Robert; Stuerzebecher, Joerg; Bode, Wolfram
CORPORATE SOURCE: Abteilung Strukturforschung, Max-Planck-Institut fuer Biochemie, Martinsried, 82152, Germany
SOURCE: Journal of Molecular Biology (2002), 316(4), 869-874
CODEN: JMOBAK; ISSN: 0022-2836
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Bivalent peptidic thrombin inhibitors consisting of an N-terminal D-cyclohexylalanine-Pro-N.alpha.(Me)Arg active-site fragment, a flexible polyglycine linker, and a C-terminal hirugen-like segment directed towards the fibrinogen recognition exosite inhibit thrombin with Ki values in the picomolar range, remaining stable in buffered soln. at pH 7.8 for at least 15 h. In order to investigate the structural basis of this increased stability, the most potent of these inhibitors, I-11 (Ki = 37pM), contg. an N.alpha.(Me)Arg-Thr bond, was crystd. in complex with human .alpha.-thrombin. X-ray data were collected to 1.8 .ANG. resoln. and the crystal structure of this complex was detd. The Fourier map displays clear electron d. for the N-terminal fragment and for the exosite binding segment. It indicates, however, that in agreement with Edman sequencing, the peptide had been cleaved in the crystal, presumably due to the long

incubation time of 14 days needed for crystn. and data collection. The N.alpha.(Me) group is directed toward the carbonyl oxygen atom of Ser214, pushing the Ser195 O.gamma. atom out of its normal site. This structure suggests that upon thrombin binding, the scissile peptide bond of the intact peptide and the Ser195 O.gamma. are sepd. from each other, impairing the nucleophilic attack of the Ser195 O.gamma. toward the N.alpha.(Me)Arg carbonyl group. In the time-scale of two weeks, however, cleavage geometries favored by the crystal allow catalysis at a slow rate. (c) 2002 Academic Press.

IT **428499-57-4D**, complexes with thrombin
RL: PRP (Properties)
(crystal structure indicates Me group of N.alpha.(Me)Arg-contg. peptide inhibitor impairs cleavage by disturbing active site geometry of human thrombin)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:94674 HCAPLUS
DOCUMENT NUMBER: 132:262009
TITLE: Design of P1' and P3' Residues of Trivalent Thrombin Inhibitors and Their Crystal Structures
AUTHOR(S): Slon-Usakiewicz, Jacek J.; Sivaraman, J.; Li, Yunge; Cygler, Miroslaw; Konishi, Yasuo
CORPORATE SOURCE: Biotechnology Research Institute, National Research Council of Canada, Montreal, QC, H4P 2R2, Can.
SOURCE: Biochemistry (2000), 39(9), 2384-2391
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Synthetic bivalent thrombin inhibitors comprise an active site blocking segment, a fibrinogen recognition exosite blocking segment, and a linker connecting these segments. Possible nonpolar interactions of the P1' and P3' residues of the linker with thrombin S1' and S3' subsites, resp., were identified using the "Methyl Scan" method [Slon-Usakiewicz et al. (1997) Biochem. 36, 13494-13502]. A series of inhibitors (4-tert-butylbenzenesulfonyl)-Arg-(D-pipecolic acid)-Xaa-Gly-Yaa-Gly-.beta.Ala-Asp-Tyr-Glu-Pro-Ile-Pro-Glu-Glu-Ala-(.beta.-cyclohexylalanine)-(D-Glu)-OH, in which nonpolar P1' residue Xaa or P3' residue Yaa was incorporated, were designed and improved the affinity to thrombin. Substitution of the P3' residue with D-phenylglycine or D-Phe improved the Ki value to (9.5 .+-. 0.6) .times. 10-14 or 1.3 .+-. 0.5 .times. 10-13 M, resp., compared to that of a ref. inhibitor with Gly residues at Xaa and Yaa residues (Ki = (2.4 .+-. 0.5) .times. 10-11 M). Similarly, substitution of the P1' residue with L-norleucine or L-.beta.-(2-thienyl)alanine lowered the Ki values to (8.2 .+-. 0.6) .times. 10-14 or (5.1 .+-. 0.4) .times. 10-14 M, resp. The linker Gly-Gly-Gly-.beta.Ala of the inhibitors in the previous sentence was simplified with 12-aminododecanoic acid, resulting in further improvement of the Ki values to (3.8 .+-. 0.6) .times. 10-14 or (1.7 .+-. 0.4) .times. 10-14 M, resp. These Ki values are equiv. to that of natural hirudin (2.2 .times. 10-14 M), yet the size of the synthetic inhibitors (2 kD) is only one-third that of hirudin (7 kD). Two inhibitors, with L-norleucine or L-.beta.-(2-thienyl)alanine at the P1' residue and the improved linker of 12-aminododecanoic acid, were crystd. in complex with human .alpha.-thrombin. The crystal structures of these complexes were solved and refined to 2.1 .ANG. resoln. The Lys60F side chain of thrombin moved significantly and formed a large nonpolar S1' subsite to accommodate the bulky P1' residue.

Searched by M. Smith

Liu 09/529,232

IT **197518-05-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(design of P1' and P3' residues of trivalent thrombin inhibitors and their crystal structures)
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:271384 HCAPLUS
DOCUMENT NUMBER: 130:297001
TITLE: Preparation of trivalent thrombin inhibitors
INVENTOR(S): Konishi, Yasuo; Slon, Jacek
PATENT ASSIGNEE(S): National Research Council of Canada, Can.
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9919356	A1	19990422	WO 1997-CA745	19971015
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9746122	A1	19990503	AU 1997-46122	19971015
AU 761011	B2	20030529		
EP 1023324	A1	20000802	EP 1997-944656	19971015
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NZ 503669	A	20010928	NZ 1997-503669	19971015
JP 2001519442	T2	20011023	JP 2000-515927	19971015

PRIORITY APPLN. INFO.: WO 1997-CA745 A 19971015
OTHER SOURCE(S): MARPAT 130:297001

AB Trivalent thrombin inhibitors AS-Z-P (AS represents an S subsite blocking segment, P represents a fibrinogen recognition exosite blocking segment, Z represents a S' subsite blocking segment) or their pharmaceutically acceptable salts, were prepd. The S' subsite blocking segment, besides binding to the thrombin S' subsites, connects the S subsite blocking segment and the fibrinogen recognition exosite blocking segment. This binding of Z segment together with the bindings of the AS and P segments, contributes to improve the affinity of the inhibitors significantly. The AS blocking segment and the P segment preferably have the sequence Bbs-Arg-D-Pip- (Bbs = 4-tert-butylbenzenesulfonyl, Pip = pipecolic acid) and Asp-Tyr-Glu-Pro-Ile-Pro-Glu-Glu-Ala-Cha-D-Glu-OH (Cha = .beta.-cyclohexylalanine), resp. The Z segment preferably has the sequence Xaa-Gly-Yaa-Gly-.beta.-Ala where: Xaa, Yaa = Gly, Ala, D-Ala, Val, D-Val, Phe, D-Phe, His, D-His, Nva, D-Nva, Ile, D-Ile, Nle, D-Nle, .alpha.Aib (2-aminoisobutyric acid), Phg (phenylglycine), D-Phg, Thi (.beta.-(2-thienyl)alanine), D-Thi, Chg (cyclohexylglycine), etc. Thus, Bbs-Arg-D-Pip-Thi-Gly-Gly-Gly-.beta.-Ala-Asp-Tyr-Glu-Pro-Ile-Pro-Glu-Glu-Ala-Cha-D-Glu-OH, having a Ki value of 0.051 .+-. 0.004 pM, was prepd. by

the solid phase method using a conventional Fmoc procedure. The preferred inhibitors have Ki values smaller the 1 pM and are useful for treating or preventing vascular diseases.

IT **197518-05-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of trivalent thrombin inhibitors)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

✓L4 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:660911 HCAPLUS
DOCUMENT NUMBER: 127:316126
TITLE: Nonpolar interactions of thrombin S' subsites with its bivalent inhibitor: methyl scan of the inhibitor linker
AUTHOR(S): Slon-Usakiewicz, Jacek J.; Purisima, Enrico; Tsuda, Yuko; Sulea, Traian; Pedyczak, Artur; Fethiere, James; Cygler, Miroslaw; Konishi, Yasuo
CORPORATE SOURCE: National Research Council of Canada, Biotechnology Research Institute, Montreal, QC, H4P 2R2, Can.
SOURCE: Biochemistry (1997), 36(44), 13494-13502
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We have designed bivalent thrombin inhibitors, consisting of a nonsubstrate type active site blocking segment, a hirudin-based fibrinogen recognition exosite blocking segment, and a linker connecting these segments. The inhibition provided by the bivalent inhibitors with various linker lengths revealed that a min. of 15 atoms was required for simultaneous binding of the two blocking segments of the inhibitor to thrombin without significant distortion. The crystal structure of the inhibitors with a 16-atom linker showed some conformational flexibility in the linker portion which still lies deep in the groove joining the active site and the fibrinogen recognition exosite. Since the thrombin S' subsites are not well characterized, we designed a new strategy to search for possible nonpolar interactions between the linker and the thrombin S' subsites. This strategy, the "methyl scan", is based on the incorporation of a Me side chain at each atom position of the linker by using sarcosine, D,L-alanine, D,L-3-aminoisobutyric acid, or N-methyl-.beta.-alanine. The Me groups on the second and the eighth atom positions of the linker, which correspond to the side chains of the P1' and the P3' residues, resp., improved the affinity of the inhibitors significantly. Further study of the stereospecificity showed that L-Ala at the P1' residue and D-Ala at the P3' residue preferably improved the affinity of the inhibitors 20- and 25-fold, resp. Mol. modeling calcns. using a Me probe were also carried out to identify favorable nonpolar interacting sites on the thrombin surface. Two sites were identified in the vicinity of the P1' and the P3' residues, supporting the validity of the Me scan method. Thus, this study has improved our understanding of the interactions taking place in this groove. In particular, we have been able to show that some specific structural features, such as hydrophobic complementarity between the linker and the thrombin S' subsites, could be exploited and make these inhibitors trivalent.

IT **197518-05-1**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study);

PROC (Process)
(as thrombin inhibitor; nonpolar interactions of thrombin S' subsites with its bivalent inhibitor: Me scan of inhibitor linker)

IT **197518-27-7**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(as thrombin inhibitor; nonpolar interactions of thrombin S' subsites with its bivalent inhibitor: Me scan of inhibitor linker)

L4 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:695912 HCAPLUS
DOCUMENT NUMBER: 126:14333
TITLE: Arginyl methylketones in the design of highly potent bivalent thrombin inhibitors
AUTHOR(S): Steinmetzer, T.; Rehse, P.; Zhu, B. Y.; Gibbs, B. F.; Lefebvre, J.; Cygler, M.; Konishi, Y.
CORPORATE SOURCE: Biotechnology Research Institute, National Research Council Canada, Montreal, QC, H4P 2R2, Can.
SOURCE: Peptides: Chemistry, Structure and Biology, Proceedings of the American Peptide Symposium, 14th, Columbus, Ohio, June 18-23, 1995 (1996), Meeting Date 1995, 356-357. Editor(s): Kaumaya, Pravin T. P.; Hodges, Robert S. Mayflower Scientific: Kingswinford, UK.
CODEN: 63NTAF
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Synthetic inhibitors, which mimic the binding mode of hirudin to thrombin, have been previously developed. They are composed of an active site inhibitor segment, a fibrinogen recognition exosite inhibitor segment, and a linker connecting these parts. Arginyl methylketones derivs. were incorporated in the P1-P1' region of the active site inhibitor segment and enhanced the binding affinity of the inhibitors. The synthesis and inhibitory potency of new bivalent thrombin inhibitors is presented.
IT **183969-28-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(arginyl methylketones in design of highly potent bivalent thrombin inhibitors)

=> fil reg
FILE 'REGISTRY' ENTERED AT 16:00:19 ON 11 AUG 2003
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 AUG 2003 HIGHEST RN 563979-18-0
DICTIONARY FILE UPDATES: 10 AUG 2003 HIGHEST RN 563979-18-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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L3 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 428499-57-4 REGISTRY
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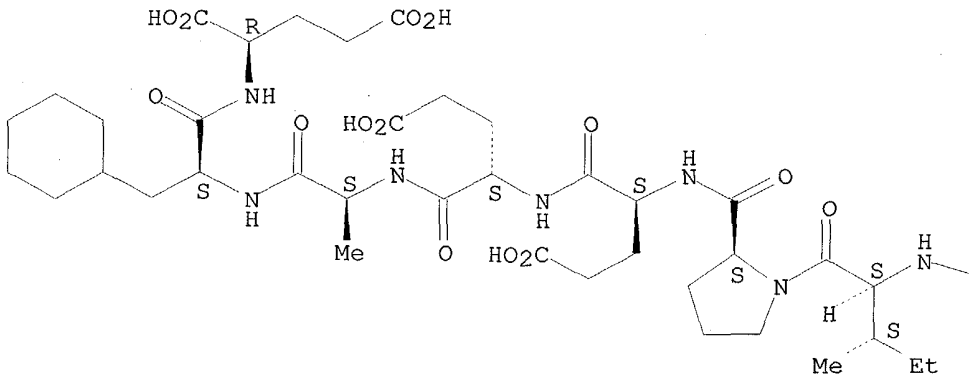
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



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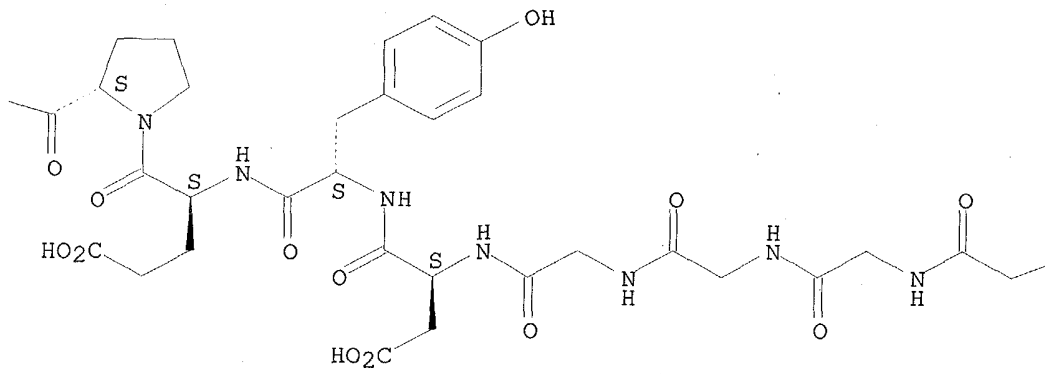

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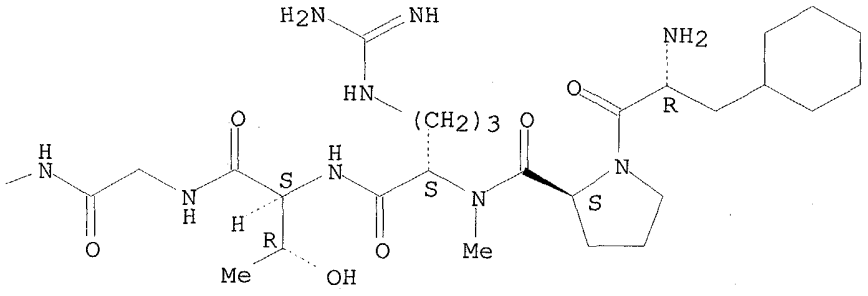

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

Searched by M. Smith

Liu 09/529,232

REFERENCE 1: 136:382133

L3 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 197518-27-7 REGISTRY
CN D-Glutamic acid, N2-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]-L-arginyl-(2R)-2-piperidinecarbonylglycylglycylglycylglycyl-N-methyl-.beta.-alanyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
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modification	Ala-17	-	cyclohexyl<Chx>

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RELATED SEQUENCES AVAILABLE WITH SEQLINK
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SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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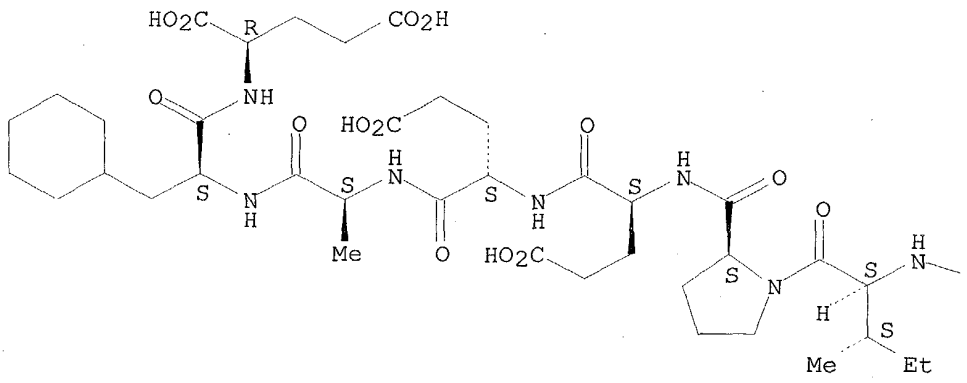

Searched by M. Smith

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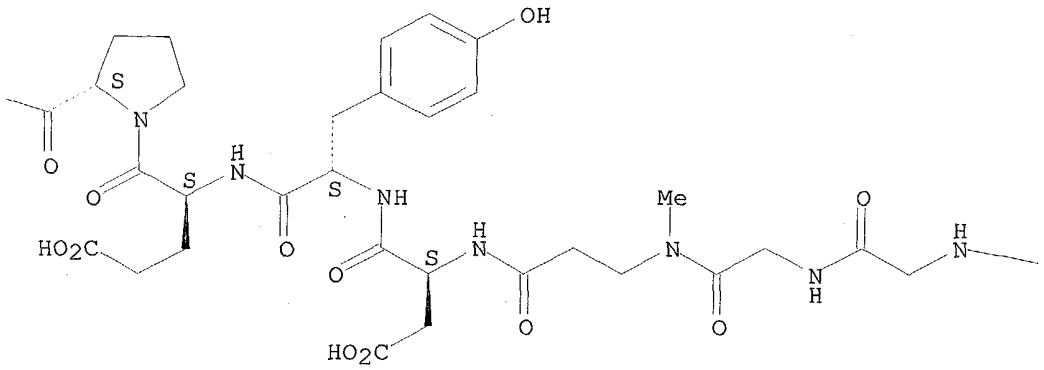

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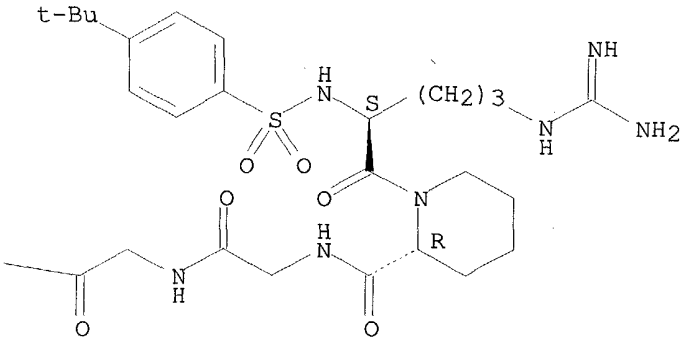

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 127:316126

L3 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 197518-05-1 REGISTRY
CN D-Glutamic acid, N2-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]-L-arginyl-(2R)-

Searched by M. Smith

Liu 09/529,232

2-piperidinecarbonylglycylglycylglycylglycyl-.beta.-alanyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH
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NTE modified (modifications unspecified)

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HITS AT: 3-16

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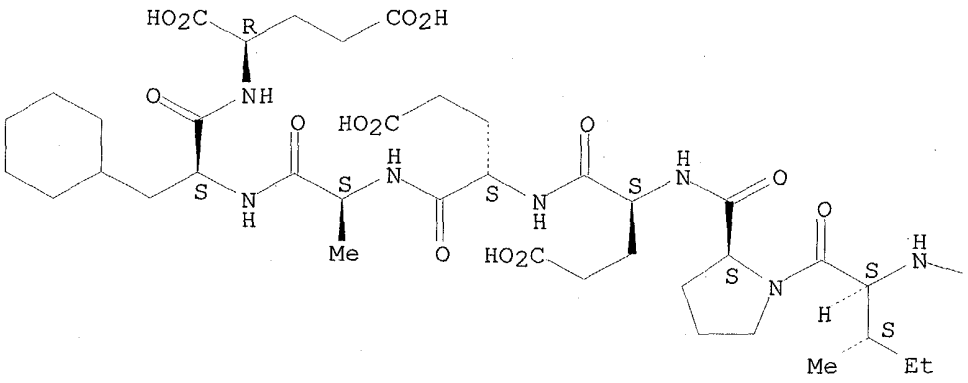
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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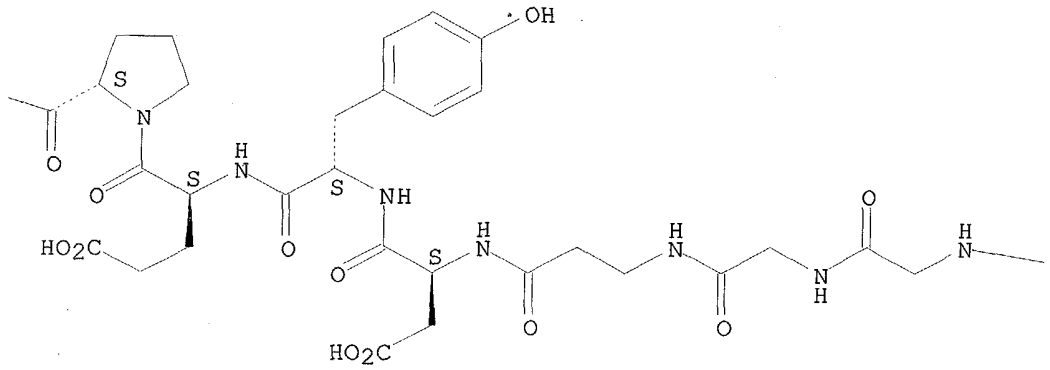

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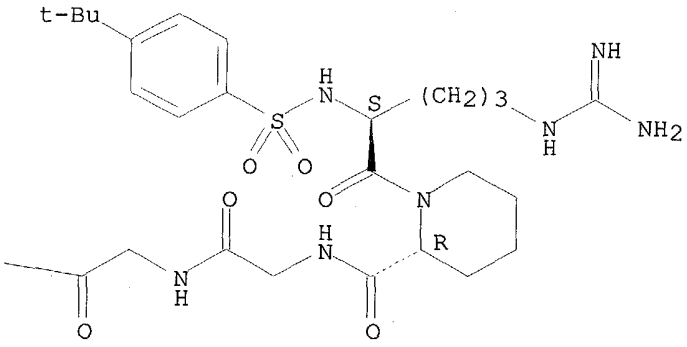

3 REFERENCES IN FILE CA (1947 TO DATE)
3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 132:262009

REFERENCE 2: 130:297001

REFERENCE 3: 127:316126

Searched by M. Smith

L3 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 183969-28-0 REGISTRY
CN D-Glutamic acid, N-[[1-[(3S)-6-[(aminoiminomethyl)amino]-3-[(3-cyclohexyl-D-alanyl-L-prolyl)amino]-2-oxohexyl]pyridiniumyl]acetyl]glycylglycylglycylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 19
NTE modified (modifications unspecified)

type	location		description
stereo	Phe-1	-	D
stereo	Glu-19	-	D

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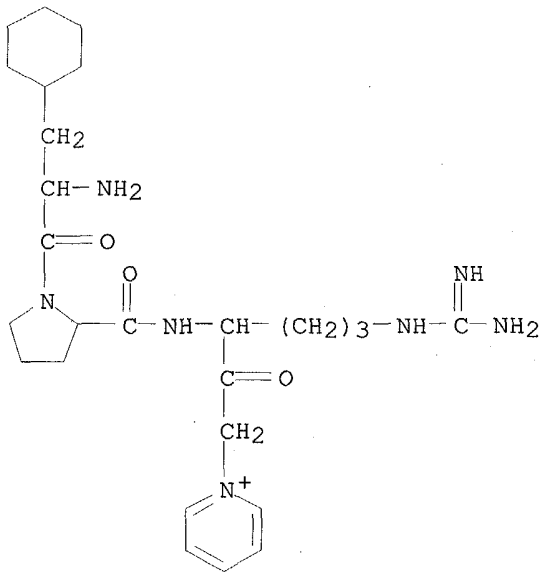
LC STN Files: CA, CAPLUS



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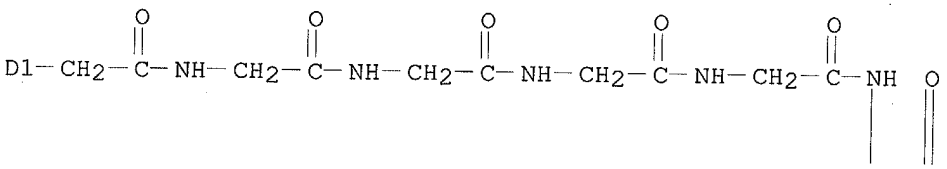

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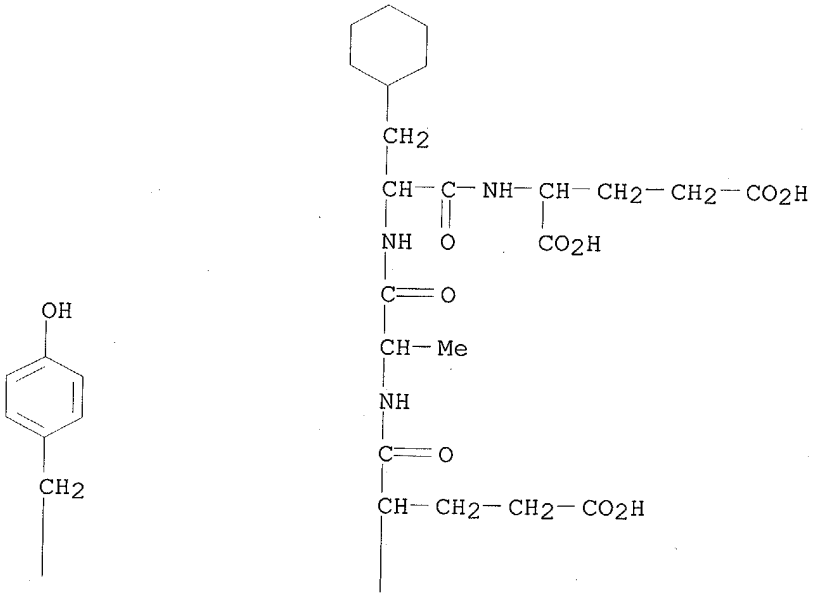

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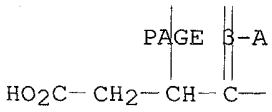

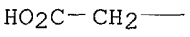

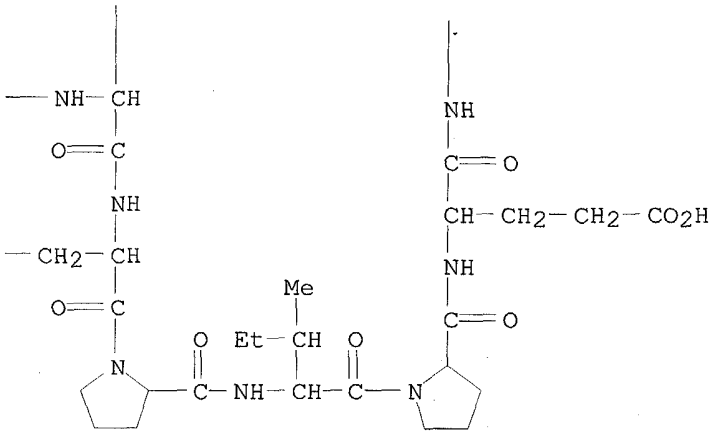

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 126:14333

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Liu 09/529,232

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FILE COVERS 1907 - 11 Aug 2003  VOL 139 ISS 7
FILE LAST UPDATED: 10 Aug 2003  (20030810/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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L5          157 SEA FILE=REGISTRY ABB=ON  DYEPIPEEA/SQSP
L6         2943 SEA FILE=REGISTRY ABB=ON  CHA OR BBS OR PIP
L7         6763 SEA FILE=REGISTRY ABB=ON  CYCLOHEXYL(L)ALANINE OR PIPECOL?
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L10       30518 SEA FILE=HCAPLUS ABB=ON  L6 OR CHA OR BBS OR PIP
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L13  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         1995:926084  HCAPLUS
DOCUMENT NUMBER:          123:340964
TITLE:                    Preparation of hirudin-analog oligopeptide bivalent
                          thrombin inhibitors
INVENTOR(S):              Konishi, Yasuo; Szewczuk, Zbigniew; Tsuda, Yuko
PATENT ASSIGNEE(S):       National Research Council Canada (NRC-CNRC), Can.
SOURCE:                   PCT Int. Appl., 79 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
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     WO 9511921         A1   19950504      WO 1994-CA585    19941025
         W:  AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB,
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NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
TD, TG

CA 2175388	AA	19950504	CA 1994-2175388	19941025
AU 9479354	A1	19950522	AU 1994-79354	19941025
EP 725797	A1	19960814	EP 1994-930133	19941025
EP 725797	B1	20010110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
AT 198603	E	20010115	AT 1994-930133	19941025
ES 2153433	T3	20010301	ES 1994-930133	19941025
US 6127337	A	20001003	US 1996-636698	19960628

PRIORITY APPLN. INFO.: GB 1993-21951 A 19931025
GB 1994-12707 A 19940624
WO 1994-CA585 W 19941025

OTHER SOURCE(S): MARPAT 123:340964

AB The title compds. R(R1)NCH(YE)COAZP [A = (un)substituted D- or L-imino acid residue, hydrophobic amino acid residue; E = H, guanidyl, amidino; P = oligopeptide of .gtoreq.6 amino or imino acid residues selected from any fibrinogen recognition exosite portion of a hirudin mol. or analog; R = (un)substituted (hetero)arylsulfonyl, (un)substituted arylsulfonyl, etc.; R1 = H, alkyl, alkoxyalkyl, aryl, aralkyl; Y = alkyl, aryl, aralkyl; Z = .gtoreq.12-atom (un)branched divalent bridge group], useful as antithrombotics, are prepd. The bulky active site inhibitor segment, hirudin, (sic) has been substituted by small nonsubstrate-type active site inhibitors of thrombin [e.g., dansyl-Arg-(D-**pipecolic** acid)]. The linker segment has also been modified using a combination of .omega.-amino acids to reduce the mol. wt. but retain sufficient length to span the two principal binding domains. Among the inhibitors prepd., dansyl-Arg-(D-**pipecolic** acid)-(12-aminododecanoic acid)-4-aminobutyric acid)-Asp-Tyr-Glu-Pro-Ile-Pro-Glu-Glu-Ala-(L-.beta.-cyclohexylalanine)-(D-Glu)-OH showed the highest affinity and displayed a competitive-type inhibition. The incorporation of the non-substrate type active site inhibitor segment and the linker of .omega.-amino acids into the bivalent thrombin inhibitors not only improved in-vitro thrombin inhibitory activity to the pM level, but overcame proteolytic susceptibility at the level of the normal scissile bond and confered high in-vivo activity.

IT **159218-32-3P 159218-33-4P 159218-34-5P**
170429-44-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hirudin-analog oligopeptide bivalent thrombin inhibitors)

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:503087 HCAPLUS
DOCUMENT NUMBER: 122:256412
TITLE: Trifunctional antithrombin and antiplatelet peptides
INVENTOR(S): Broersma, Robert J., Jr.; Owen, Thomas J.; Krstenansky, John L.
PATENT ASSIGNEE(S): Merrell Dow Pharmaceuticals Inc., USA
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9429349	A1	19941222	WO 1994-US5355	19940513
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RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2164712	AA	19941222	CA 1994-2164712	19940513
AU 9470938	A1	19950103	AU 1994-70938	19940513
AU 685470	B2	19980122		
EP 702696	A1	19960327	EP 1994-920004	19940513
EP 702696	B1	20030730		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1124964	A	19960619	CN 1994-192393	19940513
HU 73187	A2	19960628	HU 1995-3530	19940513
JP 08511518	T2	19961203	JP 1994-501790	19940513
ZA 9403958	A	19950222	ZA 1994-3958	19940606
US 5681925	A	19971028	US 1995-502989	19950717
FI 9505905	A	19951208	FI 1995-5905	19951208
NO 9504991	A	19960215	NO 1995-4991	19951208

PRIORITY APPLN. INFO.: US 1993-76066 A 19930611
WO 1994-US5355 W 19940513

OTHER SOURCE(S): MARPAT 122:256412

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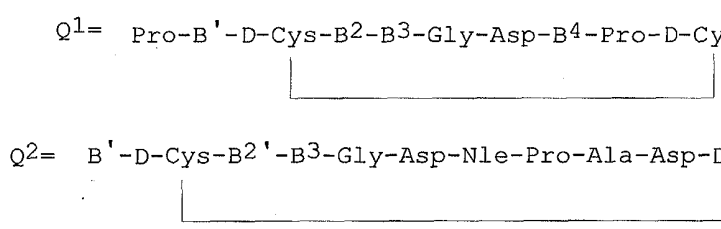

AB Compds. of the formula: X-A-B-C-Y [X = amino-terminal residue selected from H, 1-2 C1-6 alkyl, 1-2 C2-10 acyl, carbobenzyloxy, H2NC(:NH), t-butyloxycarbonyl; A = peptide analog A1-A2-A3 (A1 = D-Phe, D-Phg, D-1-Tiq, D-3-Tiq, N-Me-D-Phe, D-**Cha**, D-Chg, D-Nag, D-Thg; A2 = Pro, **Pip**, Azt; A3 = Arg, Lys, Orn, hArg); B = peptide analog Q1, Q2 (B1 = Gly, Ala, D-Ala, Val, D-Val, Gly-Gly; B2 = Gly, Gly-Gly, Gly-Gly-Gly, Gly-Gly-Gly-Gly, D-amino acid; B2' = Arg-Ile-Pro, Lys-Ile-Pro; B3 = Arg, hArg, N-Me-Arg, Lys; B4 = Nle, Phe, Met, **Cha**); C = peptide analog Asp-C1-C2-C3-C4-C5-C6-C7-C8-C9 (C1 = Phe, p-ClPhe, p-NO2Phe, Tha, Npa, Tyr, Trp; C2 = Glu, Asp; C3, C6, C7 = any amino acid; C4 = Ile, Val, Leu, Phe; C5 = Pro, Hyp, Sar, N-Me-Pgl, D-Ala; C8 = Tyr, Glu, Pro, Ala-**Cha**, Tyr-**Cha**, Tyr-Leu, Ala-Tyr; C9 = bond, Glu, D-Glu, Gln, Pro, Leu-Gln, Asp-Glu, Leu-Pro); Y = carboxyl-terminal residue selected from OH, C1-C6 alkoxy, amino, mono- or di-(C1-C4) alkyl substituted amino, benzylamino], or pharmaceutically acceptable salts thereof, are useful anticoagulant agents. The above compds. are useful for treating acute post-angioplasty occlusion, extracorporeal circulation-induced cytopenia, developing myocardial infarction, and post-fibrinolytic therapy occlusion. The peptides of the invention combine thrombin inhibition with antagonism of platelet

GPIIb/IIIa receptors in a single hybrid peptide. The peptides contain a catalytic site inhibitor of thrombin attached to an anion-binding exosite inhibitor of thrombin via a linker moiety contg. a connecting bridge and a cyclic RGD-X sequence as the platelet GPIIb/IIIa receptor antagonist.

IT **162435-93-0 162435-94-1 162435-95-2 162435-96-3 162435-97-4 162435-98-5 162435-99-6 162436-00-2 162436-01-3 162491-37-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antithrombin and antiplatelet trifunctional peptides with thrombin-inhibiting and cyclic RGD-X sequence segments)

IT **162435-85-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antithrombin and antiplatelet trifunctional peptides with thrombin-inhibiting and cyclic RGD-X sequence segments)

IT **162435-86-1 162435-87-2 162435-88-3**
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(antithrombin and antiplatelet trifunctional peptides with thrombin-inhibiting and cyclic RGD-X sequence segments)

L13 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:205649 HCAPLUS
DOCUMENT NUMBER: 122:303
TITLE: Design of Potent Bivalent Thrombin Inhibitors Based on Hirudin Sequence: Incorporation of Nonsubstrate-Type Active Site Inhibitors
AUTHOR(S): Tsuda, Yuko; Cygler, Miroslaw; Gibbs, Bernard F.; Pedyczak, Artur; Fethiere, James; Yue, Shi Yi; Konishi, Yasuo
CORPORATE SOURCE: Biotechnology Research Institute, National Research Council of Canada, Montreal, QC, H4P 2R2, Can.
SOURCE: Biochemistry (1994), 33(48), 14443-51
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Hirudin from medicinal leech is the most potent and specific thrombin inhibitor from medicinal leech with a Ki value of 2.2.times.10-14 M. It consists of an active site blocking moiety, hirudin1-48, a fibrinogen-recognition exo-site binding moiety, hirudin55-65, and a linker, hirudin49-54, connecting these inhibitor moieties. Synthetic inhibitors were designed based on the C-terminal portion of hirudin. The bulky active site blocking moiety, hirudin1-48, was replaced by small nonsubstrate-type active site inhibitors of thrombin, e.g., dansyl-Arg-(D-**pipecolic** acid). The linker moiety was replaced by .omega.-amino acids of (12-aminododecanoic acid)-(4-aminobutyric acid), and hirudin55-65 was used as a fibrinogen-recognition exo-site binding moiety in most of the inhibitors. The crystal structure of the inhibitor in complex with human .alpha.-thrombin showed that dansyl, Arg, and D-**pipecolic** acid of the active site blocking moiety occupy S3, S1, and S2 subsites of thrombin, resp., and were therefore designated as P3, P1, and P2 residues. The use of dansyl-Arg-(D-**pipecolic** acid) improved the affinity (Ki) of the inhibitor 10-100-fold (down to 1.70.times.10-11 M) compared to that of the similar compds. having D-Phe-Pro-Arg as their substrate-type inhibitor moiety (Ki = 10-9-10-10 M). The linker connected to P2 residue

eliminated the scissile peptide bond. The inhibitor was also stable against human plasma proteases. Further inhibitor design revealed that the toxic dansyl group could be replaced by 4-tert-butylbenzenesulfonyl group and 1- or 2-naphthalenesulfonyl group for in vivo studies. In addn., the replacement of hirudin55-65 with [Tyr56,Pro58,Ala63,Cha64,D-Glu65]hirudin55-65 improved the affinity of the inhibitors (Ki = 2.0.times.10-12 M) to the level 10-fold less potent than recombinant hirudin (Ki = 2.3.times.10-13 M).

IT **159218-32-3 159218-33-4 159218-34-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(design of potent bivalent thrombin inhibitors based on hirudin sequence by incorporation of nonsubstrate-type active site inhibitors)

L13 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:645748 HCAPLUS
DOCUMENT NUMBER: 121:245748
TITLE: Binding of Fluorescent and Spin-Labeled C-Terminal Hirudin Analogs to Thrombin
AUTHOR(S): Sankarapandi, Sornampillai; Woodford, Judith K.; Krstenansky, John L.; Berliner, Lawrence J.
CORPORATE SOURCE: Department of Chemistry, Ohio State University, Columbus, OH, 43210-1173, USA
SOURCE: Journal of Medicinal Chemistry (1994), 37(22), 3855-8
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Synthetic peptides based on the sequence of the neg. charged carboxyl tail of hirudin exhibit anticoagulant activity. Several antithrombin agents are being developed by chem. and structural optimization of these "hirupeptides". The present work demonstrates the design and use of novel spin-labeled and fluorescent-labeled C-terminal hirudin analogs to study the interactions of these antithrombin agents with thrombin in soln. Three labeled hirulabels were synthesized based upon the amino acid sequence of the antithrombin agent MDL 28050, X-NH-(CH2)7-CO-Asp-Tyr-Glu-Pro-Ile-Pro-Glu-Glu-Ala-**Cha**-D-Glu-OH, where X = anthraniloyl, 1,5-dansyl, or 3-carbamoyl-2,2,5,5-tetramethyl-3-pyrrolin-1-oxyl. The modifications did not significantly alter the potency of these inhibitors which showed Ki values of 100 nM. Their interactions with human and bovine thrombin were studied by ESR and fluorescence techniques. The spin-labeled hirupeptide was able to discern subtle differences in binding to human vs. bovine thrombin. The 8-aminooctanoic acid spacer arm placed the nitroxide moieties near the active site, near regions of the autolysis loops which differentiates between human .alpha.- and .gamma.-thrombin. It was also able to discern paramagnetic quenching and fluorescence energy transfer interactions, resp., between covalently attached spin labels and fluorescent probes at the active site Ser 195 and the fluorophore on the hirupeptide.

IT **158507-09-6P 158507-10-9P 158507-11-0P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(binding of fluorescent and spin-labeled C-terminal hirudin analogs to thrombin)

IT **158507-12-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(in fluorescent and spin-labeled C-terminal hirudin analogs prepn.)

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L13 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:408491 HCAPLUS
DOCUMENT NUMBER: 117:8491
TITLE: Preparation of analogs of hirudin having antiplatelet activity
INVENTOR(S): Krstenansky, John L.; Broersma, Robert J., Jr.
PATENT ASSIGNEE(S): Merrell Dow Pharmaceuticals, Inc., USA
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 468448	A2	19920129	EP 1991-112331	19910723
EP 468448	A3	19920408		
EP 468448	B1	19960612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AU 9181110	A1	19920130	AU 1991-81110	19910718
AU 640502	B2	19930826		
ZA 9105658	A	19920527	ZA 1991-5658	19910718
AT 139121	E	19960615	AT 1991-112331	19910723
ES 2090181	T3	19961016	ES 1991-112331	19910723
JP 04234327	A2	19920824	JP 1991-206241	19910724
JP 3264283	B2	20020311		
US 5574012	A	19961112	US 1995-444618	19950519

PRIORITY APPLN. INFO.: US 1990-557289 A 19900724
US 1991-714547 B1 19910611
US 1994-255846 B1 19940608

OTHER SOURCE(S): MARPAT 117:8491
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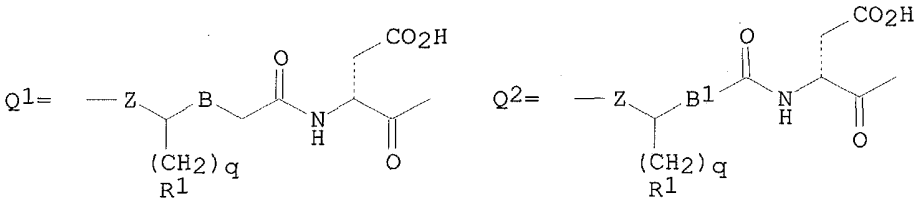

AB XA1A2A3A4A5A6A7A8A9A10A11Y [I; X = H, alkyl, acyl, PhCH2CO, H2NC(:NH), Me3CO2C; A1 = bond, 1-11 amino acid residues; A2 = Q1, Q2; Z = bond, (alkyl)imino; q = 0-5; R1 = NH2, NHC(:NH)NH2; B = CONR, NRCO, CH2NR, CH2CH2, CH:CH, CH2O, CH2S, CH2SO, CH2SO2, etc.; R = H, C1-4 alkyl; B1 = phenylene, cyclohexylene; A3 = Phe, .beta.-(2- or 3-thienyl)alanyl, .beta.-(2- or 2-naphthyl)alanyl, .beta.-(2-, 3-, or 4-pyridyl)alanyl, Tyr, Trp, etc.; A4 = Glu, Asp, Ser(OSO3H), Ser(OPO3H), (homo)cysteic acid residue, etc.; A5, A8, A9 = amino acid residues; A6 = Ile, Val, Leu, Nle, Phe; A7 = Pro, dehydroprolyl, D-Ala, Sar, thiazolidine-4-carboxylate, etc.; A10 = Tyr, Trp, Phe, Leu, Nle, Ile, Val, **Cha**, Pro, dipeptide contg. .gtoreq. 1 of the preceding residues; **Cha** = cyclohexylalanine residue; A11 = bond, peptide fragment contg. 1-5 amino acid residues; Y = OH, alkoxy, (alkyl)amino, benzylamino], were prepd.

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Liu 09/529,232

Thus, 5-GP-Gly-Asp-Trp-Glu-Pro-Ile-Pro-Glu-Glu-Ala-**Cha**-Glu-OH (5-GP = 5-guanidinopentyl), was prepd. by solid phase coupling using Me3O2C-protected amino acids followed by condensation of the aminopentyl intermediate with O-methylisourea. I showed dog antiplatelet activity with IC50 of 6-280 .mu.M.

IT **141702-47-8P 141702-49-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as anticoagulant)

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E1 THROUGH E24 ASSIGNED

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DICTIONARY FILE UPDATES: 10 AUG 2003 HIGHEST RN 563979-18-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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Searched by M. Smith

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1 170429-44-4/BI
(170429-44-4/RN)
L14 24 (159218-32-3/BI OR 159218-33-4/BI OR 159218-34-5/BI OR 141702-47-8/BI OR 141702-49-0/BI OR 158507-09-6/BI OR 158507-10-9/BI OR 158507-11-0/BI OR 158507-12-1/BI OR 162435-85-0/BI OR 162435-86-1/BI OR 162435-87-2/BI OR 162435-88-3/BI OR 162435-93-0/BI OR 162435-94-1/BI OR 162435-95-2/BI OR 162435-96-3/BI OR 162435-97-4/BI OR 162435-98-5/BI OR 162435-99-6/BI OR 162436-00-2/BI OR 162436-01-3/BI OR 162491-37-4/BI OR 170429-44-4/BI)

=> s l14 and l5
L15 24 L14 AND L5

=> d rn cn lc nte sql kwic can tot l15

L15 ANSWER 1 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **170429-44-4** REGISTRY
CN D-Glutamic acid, N2-(1-naphthalenylsulfonyl)-L-arginyl-(2R)-2-piperidinecarbonyl-12-aminododecanoyl-4-aminobutanoyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-Glutamic acid, N-[3-cyclohexyl-N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[4-[[12-[[N2-(1-naphthalenylsulfonyl)-L-arginyl-D-2-piperidinecarbonyl]amino]-1-oxododecyl]amino]-1-oxobutyl]-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-L-alanyl]-
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
uncommon	Nle-2	-	-

uncommon	Oaa-3	-	-
uncommon	Oaa-4	-	-

SQL 15
RN **170429-44-4** REGISTRY

SEQ 1 RXXXDYEPIP EEAFE
====== ===
HITS AT: 5-13

REFERENCE 1: 123:340964

L15 ANSWER 2 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162491-37-4** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-L-cysteinyl-L-arginyl-L-isoleucyl-L-prolyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-L-alanyl-L-.alpha.-aspartyl-L-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.17)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
bridge	Cys-6	- Cys-17	disulfide bridge
uncommon	Nle-13	-	-
modification	Ala-28	-	cyclohexyl<Chx>

SQL 29
RN **162491-37-4** REGISTRY

SEQ 1 FPRPGCRIPR GDXPADCGDY EPIPEEAAE
== =======
HITS AT: 19-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 122:256412

L15 ANSWER 3 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162436-01-3** REGISTRY
CN D-Glutamic acid, N-methyl-D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Nle-11	-	-
modification	Phe-1	-	methyl<Me>
modification	Ala-24	-	cyclohexyl<Chx>

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SQL 25
RN **162436-01-3** REGISTRY

SEQ 1 FPRPGCGRGD XPCGDYEPIP EEAAE
=======

HITS AT: 15-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 122:256412

L15 ANSWER 4 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162436-00-2** REGISTRY
CN D-Glutamic acid, 1-[(1,2,3,4-tetrahydro-3-isoquinolinyl)carbonyl]-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (5.fwdarw.12)-disulfide, (S)- (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Iqc-1	-	-
uncommon	Nle-11	-	-
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162436-00-2** REGISTRY

SEQ 1 XPRPGCGRGD XPCGDYEPIP EEAAE
=======

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 5 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-99-6** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinyl-D-prolyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Nle-11	-	-
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-99-6** REGISTRY

SEQ 1 FPRPGCPRGD XPCGDYEPIP EEAAE

Searched by M. Smith

====== ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 6 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-98-5** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinyl-D-threonyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Nle-11	-	-
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-98-5** REGISTRY

SEQ 1 FPRPGCTRGD XPCGDYEPIP EEAAE
====== ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 7 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-97-4** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinyl-D-valyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Nle-11	-	-
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-97-4** REGISTRY

SEQ 1 FPRPGCVRGD XPCGDYEPIP EEAAE
====== ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 8 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-96-3** REGISTRY

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CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinyl-D-tyrosyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Nle-11	-	-
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-96-3** REGISTRY

SEQ 1 FPRPGCYRGD XPCGDYEPIP EEAAE
======= ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 9 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-95-2** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-3-cyclohexyl-L-alanyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
modification	Ala-11	-	cyclohexyl<Chx>
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-95-2** REGISTRY

SEQ 1 FPRPGCGRGD APCGDYEPIP EEAAE
======= ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 10 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-94-1** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-methionyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL

Searched by M. Smith

NTE modified

type	location		description
bridge	Cys-6	- Cys-13	disulfide bridge
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-94-1** REGISTRY

SEQ 1 FPRPGCGRGD MPCGDYEPIP EEAAE
======= ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 11 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-93-0** REGISTRY
CN L-Aspartic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-L-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-L-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-L-tyrosyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE

type	location		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Nle-11	-	-

SQL 25
RN **162435-93-0** REGISTRY

SEQ 1 FPRPGCGRGD XPCGDYEPIP EEAYD
======= ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 12 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-88-3** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinyl-L-arginyl-L-isoleucyl-L-prolyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-L-alanyl-L-.alpha.-aspartyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.17)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified (modifications unspecified)

type	location		description
bridge	Cys-6	- Cys-17	disulfide bridge
uncommon	Nle-13	-	-
modification	Ala-28	-	cyclohexyl<Chx>

SQL 29

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RN **162435-88-3** REGISTRY

SEQ 1 FPRPGCRIPR GDXPADCGDY EPIPEEAAE
== =======

HITS AT: 19-27

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 122:256412

L15 ANSWER 13 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-87-2** REGISTRY
CN D-Glutamic acid, D-2-phenylglycyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Phg-1	-	-
uncommon	Nle-11	-	-
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-87-2** REGISTRY

SEQ 1 XPRPGCGRGD XPCGDYEPIP EEAAE
====== ===

HITS AT: 15-23

REFERENCE 1: 122:256412

L15 ANSWER 14 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-86-1** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-phenylalanyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-86-1** REGISTRY

SEQ 1 FPRPGCGRGD FPCGDYEPIP EEAAE
====== ===

HITS AT: 15-23

Searched by M. Smith

REFERENCE 1: 122:256412

L15 ANSWER 15 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **162435-85-0** REGISTRY
CN D-Glutamic acid, D-phenylalanyl-L-prolyl-L-arginyl-L-prolylglycyl-D-cysteinylglycyl-L-arginylglycyl-L-.alpha.-aspartyl-L-norleucyl-L-prolyl-D-cysteinylglycyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, cyclic (6.fwdarw.13)-disulfide (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
bridge	Cys-6	- Cys-13	disulfide bridge
uncommon	Nle-11	-	-
modification	Ala-24	-	cyclohexyl<Chx>

SQL 25
RN **162435-85-0** REGISTRY

SEQ 1 FPRPGCGRGD XPCGDYEPIP EEAAE
====== ===
HITS AT: 15-23

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 122:256412

L15 ANSWER 16 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **159218-34-5** REGISTRY
CN D-Glutamic acid, N2-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]-L-arginyl-(2R)-2-piperidinecarbonyl-12-aminododecanoyl-4-aminobutanoyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-Glutamic acid, N-[3-cyclohexyl-N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[4-[[12-[[N2-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]-L-arginyl-D-2-piperidinecarbonyl]amino]-1-oxododecyl]amino]-1-oxobutyl]-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-L-alanyl]-
OTHER NAMES:
CN P 553
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
uncommon	Pip-2	-	-
uncommon	Oaa-3	-	-
uncommon	Oaa-4	-	-
stereo	Pip-2	-	D

SQL 15
RN **159218-34-5** REGISTRY

Searched by M. Smith

SEQ 1 RXXXDYEPIP EEAAE
======= ===
HITS AT: 5-13

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:65979

REFERENCE 2: 123:340964

REFERENCE 3: 123:340841

REFERENCE 4: 122:303

L15 ANSWER 17 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **159218-33-4** REGISTRY
CN D-Glutamic acid, N2-(2-naphthalenylsulfonyl)-L-arginyl-(2R)-2-piperidinecarbonyl-12-aminododecanoyl-4-aminobutanoyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl-, monoacetate (salt) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-Glutamic acid, N-[3-cyclohexyl-N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[4-[[12-[[N2-(2-naphthalenylsulfonyl)-L-arginyl-D-2-piperidinecarbonyl]amino]-1-oxododecyl]amino]-1-oxobutyl]-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-L-alanyl]-, monoacetate (salt)
OTHER NAMES:
CN P 551
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
uncommon	Pip-2	-	-
uncommon	Oaa-3	-	-
uncommon	Oaa-4	-	-
stereo	Pip-2	-	D

SQL 15
RN **159218-33-4** REGISTRY

SEQ 1 RXXXDYEPIP EEAAE
======= ===
HITS AT: 5-13

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 RXXXDYEPIP EEAAE
======= ===
HITS AT: 5-13

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 RXXXDYEPIP EEAAE
======= ===
HITS AT: 5-13

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Searched by M. Smith

REFERENCE 1: 129:197800

REFERENCE 2: 123:340964

REFERENCE 3: 123:340841

REFERENCE 4: 122:303

L15 ANSWER 18 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **159218-32-3** REGISTRY
CN D-Glutamic acid, N2-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-arginyl-(2R)-2-piperidinecarbonyl-12-aminododecanoyl-4-aminobutanoyl-L-.alpha.-aspartyl-L-tyrosyl-L-.alpha.-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-3-cyclohexyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN D-Glutamic acid, N-[3-cyclohexyl-N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[4-[[12-[[N2-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-arginyl-D-2-piperidinecarbonyl]amino]-1-oxododecyl]amino]-1-oxobutyl]-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-L-alanyl]-
OTHER NAMES:
CN P 535
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
uncommon	Pip-2	-	-
uncommon	Oaa-3	-	-
uncommon	Oaa-4	-	-
stereo	Pip-2	-	D

SQL 15
RN **159218-32-3** REGISTRY

SEQ 1 RXXXDYEPIP EEAAE
====== ===
HITS AT: 5-13

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 123:340964

REFERENCE 2: 123:340841

REFERENCE 3: 122:303

L15 ANSWER 19 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **158507-12-1** REGISTRY
CN D-Glutamic acid, N-[N-[N-[N-[N-[1-[N-[1-[N-[N-[N-(8-amino-1-oxooctyl)-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-3-cyclohexyl-L-alanyl]- (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS
NTE modified (modifications unspecified)

type	------ location ------		description

uncommon	Oaa-1	-	-
modification	Ala-11	-	cyclohexyl<Chx>

SQL 12
RN **158507-12-1** REGISTRY

SEQ 1 XDYEPIPEEA AE
=========
HITS AT: 2-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 121:245748

L15 ANSWER 20 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **158507-11-0** REGISTRY
CN D-Glutamic acid, N-[3-cyclohexyl-N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[8-[[[2,5-dihydro-2,2,5,5-tetramethyl-1-oxy-1H-pyrrol-3-yl]carbonyl]amino]-1-oxooctyl]-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS
NTE modified (modifications unspecified)

type	location		description
uncommon	Oaa-1	-	-
stereo	Glu-12	-	D

SQL 12
RN **158507-11-0** REGISTRY

SEQ 1 XDYEPIPEEA AE
=========
HITS AT: 2-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 121:245748

L15 ANSWER 21 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **158507-10-9** REGISTRY
CN D-Glutamic acid, N-[N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[8-[(2-aminobenzoyl)amino]-1-oxooctyl]-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-3-cyclohexyl-L-alanyl]- (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS
NTE modified (modifications unspecified)

type	location		description
uncommon	Oaa-1	-	-
modification	Oaa-1	-	2-aminobenzoyl<2Abz>
modification	Ala-11	-	cyclohexyl<Chx>

SQL 12
RN **158507-10-9** REGISTRY

Searched by M. Smith

Liu 09/529,232

SEQ 1 XDYEPIPEEA AE
=========
HITS AT: 2-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 121:245748

L15 ANSWER 22 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **158507-09-6** REGISTRY
CN D-Glutamic acid, N-[3-cyclohexyl-N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[8-[[5-(dimethylamino)-1-naphthalenyl]amino]-1-oxooctyl]-L-.alpha.-aspartyl]-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS
NTE modified (modifications unspecified)

type	------ location ------		description
uncommon	Oaa-1	-	-
modification	Oaa-1	-	undetermined modification
modification	Ala-11	-	cyclohexyl<Chx>

SQL 12
RN **158507-09-6** REGISTRY

SEQ 1 XDYEPIPEEA AE
=========
HITS AT: 2-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 121:245748

L15 ANSWER 23 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **141702-49-0** REGISTRY
CN D-Glutamic acid, N-[N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[N-[5-[(aminoiminomethyl)amino]pentyl]glycyl]-L-.alpha.-aspartyl]-O-methyl-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-3-cyclohexyl-L-alanyl]- (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Gly-1	-	undetermined modification
modification	Tyr-3	-	methyl<Me>
modification	Ala-11	-	cyclohexyl<Chx>

SQL 12
RN **141702-49-0** REGISTRY

SEQ 1 GDYEPIPEEA AE
=========
HITS AT: 2-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Searched by M. Smith

REFERENCE 1: 117:8491

L15 ANSWER 24 OF 24 REGISTRY COPYRIGHT 2003 ACS on STN
RN **141702-47-8** REGISTRY
CN D-Glutamic acid, N-[N-[N-[N-[N-[1-[N-[1-[N-[N-[N-[N-(5-aminopentyl)glycyl]-L-.alpha.-aspartyl]-O-methyl-L-tyrosyl]-L-.alpha.-glutamyl]-L-prolyl]-L-isoleucyl]-L-prolyl]-L-.alpha.-glutamyl]-L-.alpha.-glutamyl]-L-alanyl]-3-cyclohexyl-L-alanyl]- (9CI) (CA INDEX NAME)
LC STN Files: CA, CAPLUS, USPATFULL
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Gly-1	-	undetermined modification
modification	Tyr-3	-	methyl<Me>
modification	Ala-11	-	cyclohexyl<Chx>

SQL 12
RN **141702-47-8** REGISTRY

SEQ 1 GDYEPIPEEA AE
==========
HITS AT: 2-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 117:8491

Searched by M. Smith